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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/302,687 | 04/29/1999 | DAVID I DIETZ | 9076/102 | 7243 |

7590 08/24/2006

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EXAMINER

TO, JENNIFER N

ART UNIT PAPER NUMBER

2195

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/302,687 | DIETZ ET AL. | |
| | Examiner | Art Unit | |
| | Jennifer N. To | 2195 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/22/2006, phone interview 08/04/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-18 are pending for examination.
2. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).
3. The drawing filed 04/29/1999 is objected to (see PTO 948 attached to office action dated 12/24/2002 for details). Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. Claims 8-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. Claims 8-9 are rejected under 35 U.S.C. 101 because the claimed invention are directed to system claim, but appearing to be comprised of software alone without claiming associated computer hardware required for execution, is not supported by either a specific and substantial asserted utility (i.e., transformation of data) or a well established utility (i.e., a practical application).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 8, 12-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenof ("Data Logging and Reporting for Effective Batch Control).

9. Rosenof was cited in the previous office action.

10. As per claim 1, Rosenof teaches the invention substantially as claimed including an event historian for batch processing comprising:

a history executive element for receiving process event information from one or more input sources operating in physical elements of a process and batch procedure event information that includes batch sub-procedure event information from a batch control device, wherein the batch control device is separate from the physical elements of the process (figs. 2-3; page 30, the historical report assembles data from physical elements of a process including specific information relating to individual batches), and for automatically deriving relationships among portions of said process event information and batch procedure event information based on generated event messages (fig. 5; pages 29-32, an event log signals various stages of the process which

are then displayed graphically to a user in a relation to the ideal 'scheduled' performance);

a storage element coupled to said history executive element for persistently storing said process event information and said batch procedure event information and said derived relationships in response to requests from said history executive element (pages 30-31, separate log files are kept to track the process); and

an event information retrieval element for retrieving said process event information and said batch procedure event information in accordance with said derived relationships in response to requests from an application process (figs. 5; pages 31-32, the log files are retrieved and reported to the user via graphical interface).

Rosenof did not specifically teach the derived relationship between the batch sub-procedure event information and the process event information. However Rosenof teaches the derived relationship between the batch procedure event information and the process event information (fig. 5; pages 29-32, an event log signals various stages of the process which are then displayed graphically to a user in a relation to the ideal 'scheduled' performance).

11. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have recognized that the claimed limitation only mentioned that the batch procedure event information includes batch sub-procedure event information. Therefore, one of the scenarios the batch procedure event information could be a batch

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sub-procedure event information itself. Thus, Rosenof would satisfy the claim limitation of derived relationship between the batch sub-procedure event information and the process event information.

12. As per claim 2, Rosenof further teaches a continuous data collection element for gathering continuous data in real time wherein said continuous data relates to at least one procedure element of a batch process (pages 29-30, real time data is recorded and stored in a historical record).

13. As per claims 3-4, Rosenof teaches that wherein said information retrieval element further comprises a batch historian view client application for graphically presenting to a user said batch procedure event information and said derived relationships and said continuous data (fig. 5, pages 31-32, the log files are reported to the user via graphical interface).

14. As per claims 5-6, Rosenof further teaches a continuous data collection element for gathering continuous data in real time wherein said continuous data relates to at least one procedural element of a batch process (pages 29-30, real time data is recorded and stored in a historical record);

a batch event generator coupled to said history executive element as a first input source wherein said batch event generator generates events indicative of execution of

procedural elements of a batch process (page 30, an event log generates events that indicate the occurrence of batch events); and

a process event generator coupled to said history executive element as a second input source wherein said process event generator generates events indicative of procedural elements performed within equipment used in the control of said batch process (page 30, an event log generates events that indicate the occurrence of the process events as well as batch events) and an even log generated by said continuous data collection element (page 30).

15. As per claims 8, and 18, they are rejected for the same reason as claim 1. In addition, Rosenof teaches means for retrieving batch procedure event information that includes batch sub-procedure event information from a batch control device and process event information fro one or more sources operating separate from the batch control device in physical elements of a process corresponding to an identified batch (fig. 5, pages 31-32, the log files are retrieved and reported to the user via a graphical interface); and mean for visually presenting to a user said batch procedure event information and process event information (fig. 5; pages 31-32, the log files are retrieved and reported to the user via a graphical interface).

16. As per claim 12, Rosenof further teaches means for retrieving other batch procedure event information corresponding to a second identified batch (page 30, batch data is stored for multiple batches); and means for presenting to a user said other batch

procedure event information and relationships among portions of said other batch procedure event information wherein said means for presenting said other batch procedure event information includes means for indicating differences between said batch procedure event information and said other batch procedure event information (page 31, the graphical interface presents data relating to multiple batches simultaneously for comparison).

17. As per claim 13, Rosenof teaches that wherein said other batch procedure event information represents processing of a golden batch for comparison with other batches represented by said batch procedure event information (fig. 5; pages 31-32, the 'scheduled performance' shows the desired data and is displayed simultaneously with the actual data for comparison).

18. As per claims 14-15, Rosenof teaches that wherein said means for visually presenting includes means for presenting said batch procedure event information and said relationships in real time as said batch procedure event information is generated (pages 29-30, real time data is recorded and stored in a historical record), and means for scrolling said batch procedure event information horizontally across a user display screen (pages 31-32, the data is displayed with the time set along the horizontal axis, such that new data will be added along the horizontal access as time passes).

Allowable Subject Matter

19. Claims 9-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

20. Claims 7, and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

21. Applicant's arguments with respect to claims 1-6, 8, 12-15, and 18 have been considered but are moot in view of the new ground(s) of rejection.

22. In addition, applicant argued that Rosenof fails to teach automatically derived relationship between the batch sub-procedure event information and the process event information (see the above office action paragraphs 10-11, for explanation).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simensen et al. and Arita (cited in PTO 892) teach automatically derived relationship between the batch sub-procedure event information and the process event information in a batch control environment.

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24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To
Examiner
Art Unit 2195



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